

Arrowhead Associates

Montross, Westmoreland County, Virginia
Superfund Program Site Fact Sheet

Type of Facility: Former Metal Plating Operation

Contaminants: Cyanides, Heavy Metals, Volatile Organic Compounds
(VOCs)

Funding: Enforcement Financed

Site Description and History

Located two miles southeast of the town of Montross, Virginia, the Arrowhead Plating site occupies approximately thirty acres of land in Westmoreland County. The Scovill Corporation (Scovill) leased the property from Westmoreland Industrial Development Corporation in 1966. In 1972, Arrowhead Associates purchased the business and facility assets and, subsequently, subleased the property from Scovill. In 1983, Arrowhead reopened business under new ownership as the A. R. Winarick Company. Mattatuck Manufacturing in 1997 purchased the building. Westmoreland Development Corporation owns the water supply system and other portions of the property.

From 1966 to 1979, the facility manufactured cosmetic cases using electroplating, lacquering, and enameling processes. Arrowhead Associates stopped these manufacturing operations in 1979 but added a cosmetic-case filling operation, which is still being performed at the facility. In the early 1980s, Mattatuck Manufacturing began manufacturing automobile wire harnesses at the site and, in 1988, Virginia Elastics started using the former plating areas as warehouse space. In July 1986, Scovill and the Environmental Protection Agency (EPA) entered an Administrative Order of Consent that required Scovill to conduct a two-phase removal action. The site was listed on the National Priorities List on February 15, 1990.

The Virginia Department of Environmental Quality (VDEQ) and EPA signed a Record of Decision in September 1991. The selected cleanup alternative involved treatment of contaminated ground water and contaminated soils. It called for contaminated ground water to be pumped and treated by a combination of precipitation, air stripping, and carbon adsorption, and contaminated soils to be treated by in situ vapor extraction. The Agency for Toxic Substances and Disease Registry conducted a Preliminary Health Assessment in March 1991. The assessment determined the site was a potential public health concern because of the potential for exposure to metal contaminants in the shallow aquifer. The special notice letters and draft Consent Decree were sent in May 1992 to the potentially responsible parties. A Consent Decree was signed with Scovill in September

1994. Also, a removal action was carried out in early 1997 inside the unused portion of the on-site building. EPA removed 450 drums and smaller containers holding benzene, paints, lacquers, thinners, and lipstick that A. R. Winarick left at the site.

The site was divided into two operable units (OU-1 and OU-2) in 1998. OU-1 covers the soil remediation and OU-2 covers the ground water remediation. The Excaliber Group took over the remedial design work of OU-1 from ICF Kaiser Engineers Incorporated. The remedial design was completed in September 1999, and the soil vapor extraction system was constructed by December 1999. After testing the system, a construction completion inspection was held on March 30, 2000.

The Golden Sierra Company, now GeoSierra, took over the remedial design work of OU-2. The EPA issued an Explanation of Significant Difference (ESD) for OU-2 in October 1998 to replace the pump and treat system with a permeable reactive subsurface barrier (PRSB) to remediate the ground water at the site. A ROD Amendment was signed in September 2001 to add a cap up-gradient of the PRSB. This cap was placed over the area where the domestic sewage treatment plant had been located. The Remedial Design Report for the PRB and cap was completed in January 2002. The construction was completed in September and a construction completion inspection was held on September 23, 2002.

Threats and Contaminants

High levels of VOCs in the ground water at the site still pose a significant threat. The contamination plume extends off site, into Scates Branch and the South Fork Scates Branch where ground water discharges to the streams. Surface soil sampling did not show a widespread presence of contamination; however, VOCs, metals (especially cadmium, copper, nickel, and zinc) and cyanide were found in a few locations. In subsurface soil, high levels of VOCs were found in two former storage areas and in one of the former disposal ponds, which could act as sources of low-level threats to the underlying aquifer. Also, in the subsurface soil, heavy metals were detected in the former disposal ponds.

Current Site Status

The OU-1 soil vapor extraction system will continue to operate as long as necessary. Monitoring is being conducted on the performance of the OU-2 PRSB and will continue as long as the ground water remains contaminated.

Community Relations and Concerns

A public meeting was held June 12, 1990, to answer questions about the site, and the Proposed Remedial Action Plan public meeting was conducted in August 6, 1991. VDEQ Community Relations staff conducted community interviews in February 1992 and updated the Community Relations Plan for Remedial Design/Remedial Action in

April 1992. A public meeting was held on August 16, 2001 on the OU-2 Proposed Plan for the cap and PRSB remediation.

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